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ABSTRACT

This booklet provides guidelines for school planners and designers on the state requirements for space allocation in its K-12 public schools. Recommendations are included for various specialized facilities to assure that proper spaces can be provided beyond the typical classroom space. Guidelines are arranged under the categories of instructional, auxiliary, and service and structure spaces. Also included are guidelines for site development and planning, and a table of working heights and toilet fixture guidelines for educational occupancies. (GR)

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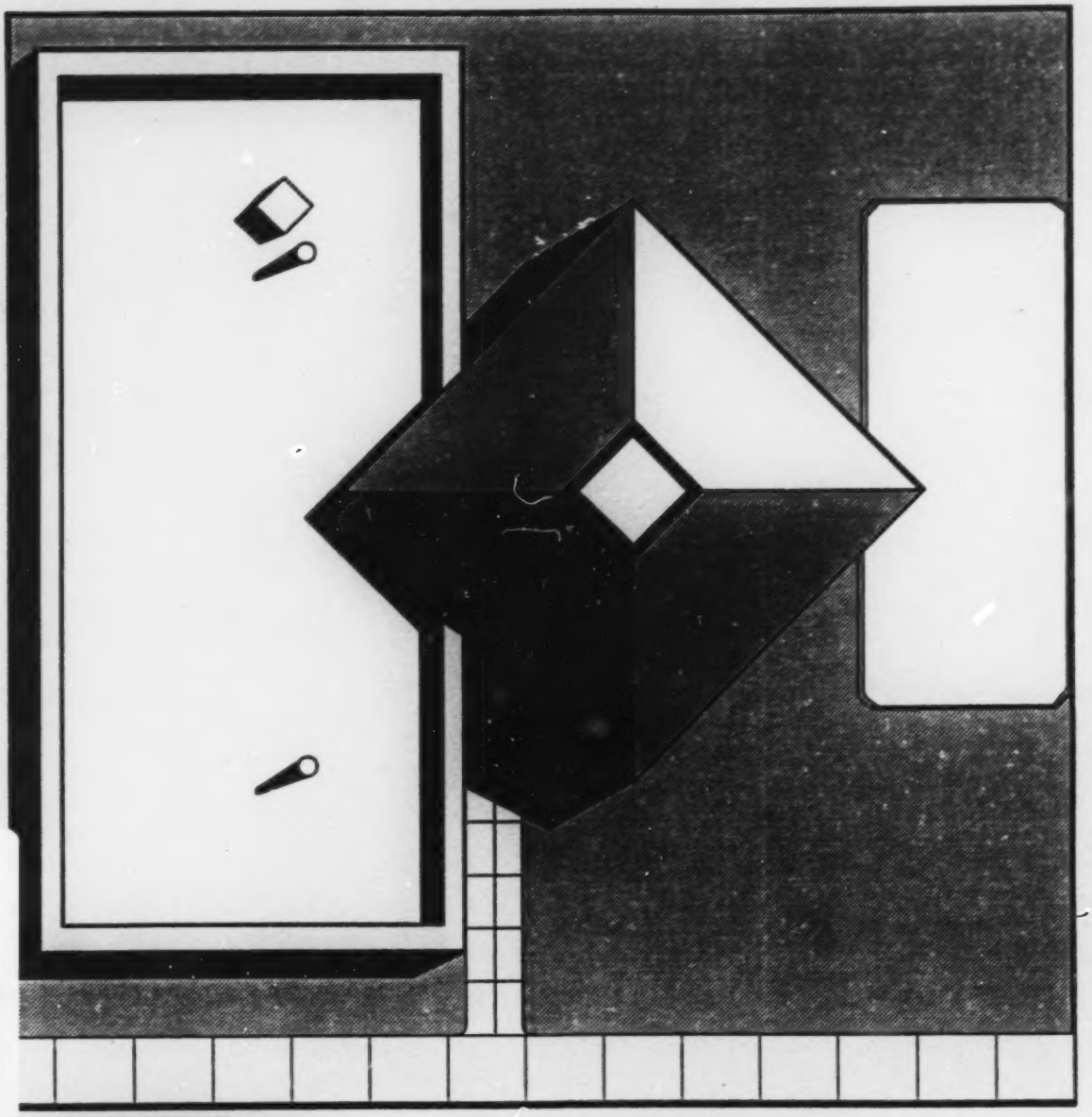
Planning for Education:

Space Guidelines for Planning Educational Facilities



Sandy Garrett
State Superintendent of Public Instruction
Oklahoma State Department of Education

Revised

1998 2

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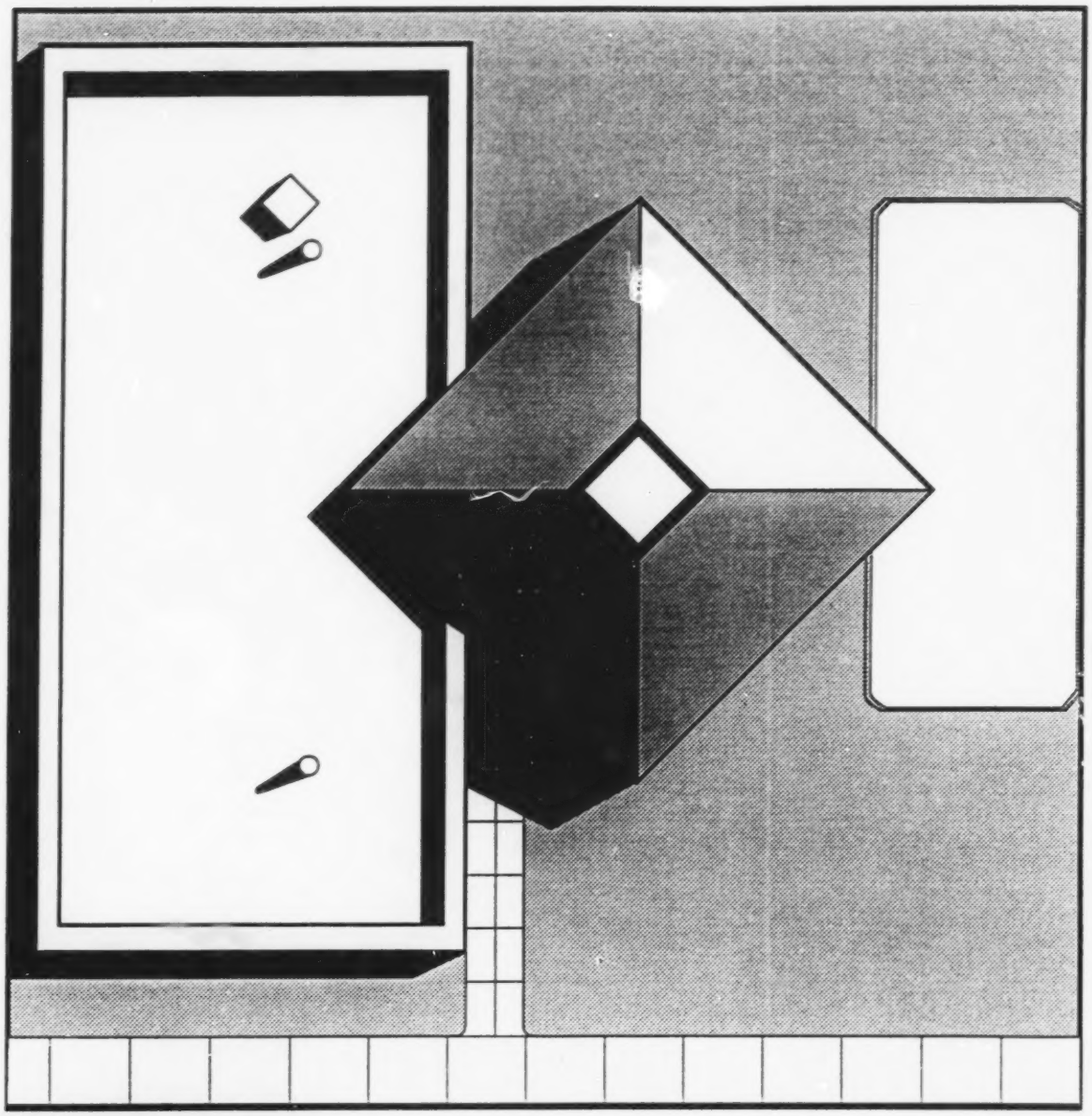

Sandy Garrett

State Superintendent of Public Instruction

Oklahoma State Department of Education

Revised

1998

PLANNING FOR EDUCATION: SPACE GUIDELINES FOR PLANNING EDUCATIONAL FACILITIES

Prepared by:

State Finance Division: Capital Improvement Section
Common School Capital Improvement Needs Assessment Committee

Revised

1998

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FOREWORD

In 1983 the Oklahoma Legislature passed Senate Bill No. 625. This bill states in part:

SECTION 2. It is hereby declared to be the intent of the Legislature to assure that students in the public schools of this State occupy facilities which are designed for adaptability to program offerings. Such facilities should be structurally safe, well-maintained and contain adequate space to meet the instructional needs of each student. It is further declared to be the intent of the Legislature that these facility standards be implemented through the Common School Capital Improvement Act.

These space guidelines for planning educational facilities have been prepared for use by school administrators and architects/engineers/planners in the planning and evaluation of new and existing educational facilities. These space guidelines were developed in conjunction with the State Four-Year Capital Improvement Plan for Public Common Schools with the purpose of defining, organizing and encouraging the process of planning for educational facilities to the extent that more adequate environments for education can be obtained. Effective and wise facility planning does not occur accidentally, but through careful studies that are sensitive to the specific individual needs of the school district. The guidelines contained herein cover only part of the information involved in the total planning process, and should be considered as recommendations to be used in preparing educational specifications based on the individual district's needs. The careful use of these standards should aid school districts in their responsibility to spend capital outlay dollars more advantageously and therefore better utilize the taxpayers' money.

School administrators, and architects/engineers/planners are encouraged to consult with Capital Improvement and State Department of Education specialists for assistance in planning individual specialized spaces such as library/media centers, cafeterias, etc.

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COMMENTARY/INSTRUCTIONS FOR USE

1. The guidelines included herein have been designed to allow for the requirements of all Oklahoma school districts regardless of size or educational program. Recommendations have been included for various specialized facilities to assure that proper spaces can be provided beyond the typical classroom space. These guidelines should not be considered "inflexible" when planning educational spaces; "tailoring" of spaces to meet the specific individual district needs is mandatory; however, the use of square footage that are less than the minimum acceptable recommendation should be carefully considered. Effective and wise facility planning must include both the present and future needs of a school district. It is extremely difficult, but not impossible, to provide an adequate and sound educational program without a comparable school plant.

2. Throughout this publication for the purposes of organization, guidelines for facilities have been arranged under the following categories:

Instructional Spaces	**Auxiliary Spaces**	**Service and Structure Spaces**
Kindergarten	Administration	Custodial
General Classrooms and Laboratories	Auditorium	General Storage
Arts and Crafts	Food Preparation, Service and Dining Facilities	Restrooms
Business and Commercial	Guidance and Counseling	Mechanical Rooms
Consumer Home Economics	Nurse/Health Clinic	Corridors and Wall Areas
Driver Education	Music	
Health Instruction	Physical Education	
Instructional Vocational	Staff Personnel Spaces	
Physical Science	Student Space	
Special Education		
Specialized Spaces		
Vocational Agriculture		
Vocational-Technical		

3. All square footage shown, unless otherwise noted, are net square feet and do not include circulation, mechanical and electrical spaces, and wall area. For approximate gross square footage, add 20 percent to the total net area.

4. Related service or support area entries have been included in the space guidelines after the major activity listing. Except where noted otherwise, the square footage requirements associated with these entries should be considered in addition to the square footage outlined for the major activity. It is up to each school district to carefully consider what effect the inclusion or exclusion of square footage affirmed to service or support areas will have on the program offered in that space both now and in the future.

5. Full consideration should be given to which major activities, as well as which service and support areas, are included in the planning of space requirements of present and future educational programs. Evaluation of space allocations in other grade organizations should be considered if education programs are more or less extensive than that indicated.

6. Assistance in evaluating space requirements is available from the Capital Improvement Section of the State Department of Education.

PRELIMINARY SPACE PLANNING GUIDELINES

Suggested Methods of Calculating Preliminary Net and Gross Square Footage for School Buildings

	(1) Total Net Area (Sq. ft. Per Student)	Total Gross Area (Sq. ft. Per Student)
Elementary School K-6 (2)		
Instructional Spaces (3)	37.5	46.86
Auxiliary Spaces (3)	27.67	34.53
Service and Structure Spaces (3)	6	6.6
Total	71.17	87.99
Middle/Junior High Schools 7-8; 6-7-8; 7-8-9		
Instructional Spaces	59	73.75
Auxiliary Spaces	33	41.25
Service and Structure Spaces	7	7.7
Total	99	122.7
High School 9-12 (4)		
Instructional Spaces	60	75.00
Auxiliary Spaces	37	46.75
Service and Structure Spaces	9	9
Total	106	130.75

NOTES:

(1) The Total Net square footage include space requirements for corridors, but exclude area required for walls. For conversion to gross square footage: net sq. ft. (1.24) = gross sq. ft.

(2) All preliminary space guidelines are based on a minimum student capacity of 450.

(3)

Instructional Spaces Included:	Auxiliary Spaces Included:	Service and Structure Spaces Included:
General Classrooms	Administration	Custodial
Arts and Crafts	Food Preparation Facilities	General Storage
Business and Commercial	Guidance and Counseling	Restrooms
Consumer Home Economics	Nurse/Health Clinic	
Health Instruction	Media Center/Library	
	Multipurpose Room	
	Music	
	Staff Personnel Spaces	

(4) These figures do not include space requirements for technical and vocational programs which should be added if they so apply.

SPACE GUIDELINES FOR ELEMENTARY SCHOOLS (K-6)

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
INSTRUCTIONAL SPACES				
KINDERGARTEN				
General Instructional Area	20	36-40	720	800
Material Storage			95	105
Student Storage			25	35
Student Toilet (1)			25	60
Kitchenette			-	60
Outside Play Area	20	100-125	2000	2500
Outside Storage			45	55
GENERAL CLASSROOMS AND LABORATORIES - GRADES 1-6				
General Classrooms	20	28-36	560	720
Material Storage			70	80
Student Storage			25	35
ARTS AND CRAFTS				
Instructional/Laboratory Area	20	36-40	720	800
Material Storage			100	150
Project Storage			100	150
Kiln			55	60
Project Display Area			-	20
SPECIAL EDUCATION (2)				
Educable Mentally Handicapped	12	45-65	720	780
Material Storage			70	75
Outside Storage			45	50
Student Storage			25	30
Trainable Mentally Handicapped	10	45-75	700	750
Material Storage			70	75
Outside Storage			45	50
Student Storage			25	30
Student Toilet			40	45
Severe and Profoundly Handicapped	5	90-150	625	750
Material Storage			70	75
Student Storage			25	30
Student Toilet and Bath			90	100
Physically Handicapped (Classroom)	8	80-100	640	800
Material Storage			70	75
Outside Storage			45	50
Student Storage			25	30
Student Toilet and Bath			90	100
Emotionally Disturbed	8	80-90	640	800
Student Storage			25	30

(1) See Page 25 for toilet fixture recommendations.

(2) Consult State Department of Education specialists for planning guide and/or assistance.

AUXILIARY SPACES	MEALS SERVED PER DAY					
FOOD PREPARATION, SERVICE AND DINING FACILITIES (1)						
Kitchen	200	400	600	1000	1400	1600
Receiving	80 sq. ft.	100 sq. ft.	120 sq. ft.	160 sq. ft.	180 sq. ft.	200 sq. ft.
Dry Food Storage	80 sq. ft.	100 sq. ft.	280 sq. ft.	480 sq. ft.	640 sq. ft.	840 sq. ft.
Non-Food Storage	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.
Preparation Area	475 sq. ft.	660 sq. ft.	840 sq. ft.	960 sq. ft.	1320 sq. ft.	1400 sq. ft.
Refrigeration Storage	160 sq. ft.	160 sq. ft.	160 sq. ft.	180 sq. ft.	320 sq. ft.	320 sq. ft.
Dishwashing Area	120 sq. ft.	120 sq. ft.	120 sq. ft.	240 sq. ft.	240 sq. ft.	240 sq. ft.
Office/Locker Area/Toilet	40 sq. ft.	80 sq. ft.	120 sq. ft	180 sq. ft.	480 sq. ft.	320 sq. ft.
Serving Area	300 sq. ft.	450 sq. ft.	600 sq. ft.	600 sq. ft.	900 sq. ft.	1200 sq. ft.
Dining Area	2400 sq. ft.	2400 sq. ft.	2400 sq. ft.	3995 sq. ft.	5590 sq. ft.	7200 sq. ft.

	MEALS SERVED PER DAY			
FOOD PREPARATION, SERVICE AND DINING FACILITIES				
ALTERNATE METHOD	100-200	200-400	400-600	600-1000
Kitchen (including all related functions)	800-1000 sq. ft.	1000-1500 sq. ft.	1500-1800 sq. ft.	1800-2000 sq. ft.
Dining Area	Minimum 10 sq. ft. per person			

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
ADMINISTRATION				
Principal's Office			125	150
Reception/Secretarial Area			200	250
Office Workroom and Storage			200	300
Conference Room			200	300
Records/Vault			60	75
Itinerant Office			100	120
Book/General Storage			125	200
STAFF PERSONNEL SPACE				
Teacher's Workroom and Storage			150	200
Kitchenette			-	60
Staff Toilet - Individual (Each) (2)			45	65
GUIDANCE AND COUNSELING				
Counselor's Office			100	200
NURSE/HEALTH CLINIC				
Office, Examing Room, Cot Area			230	260
Storage				
Toilet (2)			50	60

(1) Consult State Department of Education specialists for planning guide and/or assistance.

(2) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
MEDIA CENTER/LIBRARY (1)				
Reading/Browsing	10% of Enrollment Excluding Kgtn. or a Maximum of 100 students	40 - 45	1400	-
Office/Workroom			100	200
AV Storage			300	400
Story Telling Pit	30	10	-	300
MULTIPURPOSE (1)				
Play/Dining	100% of Enrollment	12 - 18	2400	-
Stage			-	300
Equipment Storage			100	250
Chair, Table Storage			100	250
Kitchen and Service			See Page 4	
MUSIC				
Instructional/Practice (14' to 16' Ceiling Height)	20	36 - 40	720	800
Material Storage			75	100
Instrument Storage (Secured)			-	200
PHYSICAL EDUCATION				
P.E. Gymnasium	85	40 - 42.5	3400	3600
Storage			100	150
SERVICE AND STRUCTURE SPACES				
RESTROOMS				
Student Toilet (2)	100% of Enrollment	1.25 - 1.5	-	-
Classroom Toilet (2)			25	30
CUSTODIAL				
Custodial Closet	Min. One per Floor, One for every 8000 sq. ft. of floor area		-	60
with mop sink			75	90
Custodial Office			75	90
Locker Room	One locker per employee			Needs Vary
Toilet (2)			45	65
Workshop				Needs Vary
Storage - Materials, Equipment, Custodial Supplies Receiving and Shipping Area			60	100

(1) Consult State Department of Education specialists for planning guide and/or assistance.

(2) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
STORAGE				
General Storage				Needs Vary
Exterior Storage				Needs Vary
Grounds Maintenance Equipment			75	125
Physical Education Equipment Storage			100	150
Flammable Material Storage				Needs Vary
MECHANICAL ROOMS, CORRIDORS AND WALL AREA				
Should not utilize more than 20% of the gross square foot area of the building.				

SPACE GUIDELINES FOR MIDDLE/JUNIOR HIGH SCHOOLS (7-8, 7-8-9)

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
INSTRUCTIONAL SPACES				
GENERAL CLASSROOMS AND LABORATORIES				
General Classrooms	25	28 - 36	700	900
Material Storage			70	80
ARTS AND CRAFTS				
Instructional/Laboratory Area	28	38 - 42	1100	1200
Material Storage			140	150
Project Storage			140	150
Kiln			55	60
Project Display Area			-	20
BUSINESS AND COMMERCIAL				
Business Education	28 - 30	35 - 40	1000	1200
Material Storage			50	75
CONSUMER HOME ECONOMICS				
Homemaking (Based on a one-teacher introductory unit)				
Instructional Area	28	48 - 54	1350	1500
Material Storage			120	150
Home Economics (Comprehensive)				
Instructional Area (Includes one or more design features such as fitting area, laundry, kitchen, material storage, or textile work area)	38	64 - 85	2400	3200
PHYSICAL SCIENCE				
Science Demonstration Classroom	30	30 - 33	900	1000
Material Storage			100	140
SPECIAL EDUCATION (1)				
Educable Mentally Handicapped	12	45 - 65	720	780
Material Storage			70	75
Trainable Mentally Handicapped	10	45 - 75	700	750
Material Storage			70	75
Student Toilet (2)			40	45
Severely/Profoundly Handicapped	5	90 - 150	625	750
Material Storage			70	75
Student Storage			25	30
Student Toilet and Bath (2)			90	100

(1) Consult State Department of Education specialists for planning guide and/or assistance.

(2) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
SPECIAL EDUCATION CONTINUED				
Physically Handicapped (Classroom)	8	80 - 100	640	800
Material Storage			70	75
Student Toilet and Bath (1)			90	100
Emotionally Disturbed	8	80 - 90	640	800
Material Storage			70	75
Student Storage			25	30
SPECIALIZED SPACES				
Green House - Attached				Needs Vary
VOCATIONAL-TECHNICAL				
Industrial Arts - General Shop				
Work Area	25	40 - 48	1000	1200
Planning/Classroom			700	750
Material Storage			200	270
Project Storage			190	210
Finishing Area			190	210
Toilet/Lavatory (1)			100	150
AUXILIARY SPACES				
ADMINISTRATION				
Principal's Office			125	150
Other Administrative Personnel (Per office)			100	120
Office Workroom and Storage			250	350
Conference Room			300	400
Records/Vault			60	75
Itinerant Office			100	120
Book/General Storage			125	200
STAFF PERSONNEL SPACE				
Teacher's Workroom and Storage			200	300
Kitchenette			-	60
Staff toilet - Individual (Each) (1)			45	65
GUIDANCE AND COUNSELING				
Counselor's Office (Each)			100	120

(1) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
AUDITORIUM (1) (2)				
General Seating	600	7	4200	-
Gallery and Lobby Area			1000	-
Standard Proscenium				
Stage and Off-Stage Area			3000	-
General Storage			150	-
Storage/Properties Storage			600	-
Stage Dressing Rooms (Each)			200	-
Public Toilets (Each) (3)			150	-
Lecture Area				
(Two-Room Unit 1250 sq.ft. each)			2500	-
Lecture Area (One-Room Unit)			2500	-

	MEALS SERVED PER DAY					
FOOD PREPARATION, SERVICE AND DINING FACILITIES (1)	200	400	600	1000	1400	1600
Kitchen						
Receiving	80 sq. ft.	100 sq. ft.	120 sq. ft.	160 sq. ft.	180 sq. ft.	200 sq. ft.
Dry Food Storage	80 sq. ft.	180 sq. ft.	280 sq. ft.	480 sq. ft.	640 sq. ft.	840 sq. ft.
Nonfood Storage	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.
Preparation Area	475 sq. ft.	600 sq. ft.	840 sq. ft.	960 sq. ft.	1320 sq. ft.	1400 sq. ft.
Refrigerated Storage	160 sq. ft.	160 sq. ft.	160 sq. ft.	180 sq. ft.	320 sq. ft.	320 sq. ft.
Dishwashing Area	120 sq. ft.	120 sq. ft.	120 sq. ft.	240 sq. ft.	240 sq. ft.	240 sq. ft.
Office/Locker Area/ Toilet	40 sq. ft.	80 sq. ft.	120 sq. ft.	180 sq. ft.	240 sq. ft.	320 sq. ft.
Serving Area	300 sq. ft.	450 sq. ft.	600 sq. ft.	600 sq. ft.	900 sq. ft.	1200 sq. ft.
Dining Area	2400 sq. ft.	2400 sq. ft.	2400 sq. ft.	3995 sq. ft.	5590 sq. ft.	7200 sq. ft.

	MEALS SERVED PER DAY			
FOOD PREPARATION, SERVICE AND DINING FACILITIES ALTERNATE METHOD	100-200	200-400	400-600	600-1000
Kitchen (including all related functions)	800-1000 sq. ft.	1000-1500 sq. ft.	1500-1800 sq. ft.	1800-2000 sq. ft.
Dining Area	Minimum 10 sq. ft. per person			

(1) Consult State Department of Education specialists for planning guide and/or assistance.
(2) Multi-use of this space is encouraged.
(3) See appropriate building code for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
NURSE/HEALTH CLINIC				
Office/Examining Room/ Cot Area			230	260
Storage			70	80
Toilet			50	60
MEDIA CENTER/ LIBRARY (1)				
Reading/Browsing	10% of Enrollment or a Maximum of 100 Students	40 - 45	1400	-
Office/Workroom			150	200
AV Storage			300	400
MULTIPURPOSE (1)				
Play/Dining	100% of Enrollment	12 - 18	2400	-
Stage			-	300
Equipment Storage			100	250
Chair, Table Storage			100	250
Kitchen and Service			See Page 9	
MUSIC				
Vocal Classroom (14' to 16' Ceiling Height)	30	30 - 33	900	1000
Practice Room			35	40
Music Library			80	90
Office/Reference/Storage			100	120
Material Storage			120	130
Band/Instructional/Practice (14' to 16' Ceiling Height)	30	30 - 37	150 1000	- 1100
Ensemble Storage			250	300
Practice Room (Each)			35	40
Office/Reference/Storage			200	250
Material Storage			120	130
Instrument Storage (Secured)			200	400
Uniform Storage			100	-
PHYSICAL EDUCATION				
Gymnasium (Main) (20' Ceiling Height Min.)				
Basketball Court (50' x 84') plus 8' safety lanes			6600	-
Spectator Seating	500	4	2000	-
Lobby (Based on seating for approx. 500)			500	-

(1) Consult State Department of Education specialists for planning guide and/or assistance.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
PHYSICAL EDUCATION (Continued)				
Gymnasium (Continued)				
Public Toilets (1)			300	-
Concession			120	-
Trophy Display			30	-
P. E. Dressing Rooms				
Locker/Dressing Area	50	12	600	-
Shower Area	50	4	200	-
Drying Area	50	2	100	-
Toilet (1)	50	2	100	-
P. E. Activity Room			1200	-
Office and Storage				
Office			100	-
Toilet and Shower			90	-
Storage (General)			150	
Storage (Equipment)			360	-
Multipurpose Room	165	8.5	1400	-
Weight Room	89	4.5	400	-
Gymnastics	75	8	600	-
Wrestling			1000	-
STUDENT SPACES				
Student Store				
General Sales Area			50	75
Material Storage				Needs Vary
Student Personnel Storage	100% of Enrollment	.5-1.0	-	-
SERVICE AND STRUCTURE SPACES				
Restrooms				
Student Toilet (1)	100% of Enrollment	1.25-1.5	-	-
Custodial				
Custodial Closet	Minimum One per Floor, One for every 8000 sq. ft. of floor area		-	60
with mop sink			75	90

(1) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
SERVICE AND STRUCTURE SPACES				
Custodial (Continued)				
Custodial Office				Needs Vary
Locker Room	One locker per employee		45	65
Toilet (1)				Needs Vary
Workshop			60	100
Storage - Materials, Equipment, Custodial Supplies Receiving and Shipping Area				Needs Vary
Storage				
General Storage				Needs Vary
External Storage				
Grounds Maintenance Equipment			75	125
Physical Education Equipment Storage			100	150
Flammable Material Storage				Needs Vary
Mechanical Rooms, Corridors and Wall Area Should not utilize more than 20% of the gross square foot area of the building.				
FAMILY & CONSUMER SCIENCE EDUCATION				
Family and Consumer Sciences (Based on a one-teacher Introductory unit)				
Instructional Area	20	48-54	960	1080
Computer Area	-	-	-	-
Material Storage			120	150
Family and Consumer Sciences (Comprehensive)				
Instructional Area (Includes one or more design features such as fitting area, laundry, food laboratory, teaching resource storage, locked storage closet, or textile work area)	20	64-85	1280	1700
Instructor's Office Telephone			100	

(1) See Page 25 for toilet fixture recommendations.

SPACE GUIDELINES FOR HIGH SCHOOLS (9-12)

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
INSTRUCTIONAL SPACES				
GENERAL CLASSROOMS AND LABORATORIES				
General Classrooms	25	28 - 30	700	750
Material Storage			60	70
ARTS AND CRAFTS	20	180-200	3600	4000
Instructional/Laboratory Area			500	600
Material Storage			150	250
Camera Processing			100	110
Darkroom			200	250
Tool Storage			150	175
BUSINESS AND COMMERCIAL				
Typing/Word Processing	25	40 - 45	1000	1125
Teacher's Office			50	50
Material Storage			60	60
Advance Shorthand/Typing	25	40 - 50	1000	1250
Teacher's Office			50	50
Material Storage			60	60
Office Procedures/Business	25	50 - 60	1250	1500
Teacher's Office			50	50
Material Storage			60	60
Bookkeeping/General Business	25	35 - 40	875	1000
Teacher's Office			50	50
Material Storage			60	60
Data Processing Lab	15	60 - 63	900	945
Teacher's Office			50	50
Material Storage			60	60
CONSUMER HOME ECONOMICS				
One-Teacher Unit (Comprehensive) (Includes one or more design features such as fitting area, laundry, kitchen, material storage, project storage, or textile work area)	28	64 - 85	1800	2400
Clothing Lab	30	35 - 40	1100	1200
Fitting			45	55
Material Storage			120	130
Project Storage			95	105
Individual Foods Lab	30	40 - 45	1200	1350
Laundry (Used by all)			45	50
Material Storage			70	80
Living Room/Dining Room (Optional)				

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
DRIVER EDUCATION				
Driver Training Lab - 12 Simulators			500	-
HEALTH INSTRUCTION				
Lab	25	45-50	1125	1250
Office		60-70	100	120
Planning/Classroom			700	750
Storage			300	370
Library			200	270
Individualized Learning Center			370	
Toilet/Lavatory			100	150
INSTRUCTIONAL VOCATIONAL				
Distributive Education				
Lab/Classroom	25	60-70	1500	1750
Material Storage			300	370
PHYSICAL SCIENCE				
Biology Classroom/Laboratory	28	30-34	840	1000
Chemistry Classroom/Laboratory	28	45-52	1260	1460
Physics Classroom/Laboratory	28	45-52	1260	1460
PHYSICAL SCIENCE				
ALTERNATE METHOD				
Academic Instructional Area	28	28-30	785	840
Biology Laboratory	28	30-40	840	1120
Chemistry Laboratory	28	33-40	925	1120
Physics Laboratory	28	33-40	925	1120
Individual Project Area			105	105
Darkroom (Include as required)			75	100
Prep/Storage Area				
(Includes office/prep for two instructional areas, storage, etc.)			500	600
SPECIAL EDUCATION (1)				
Educable Mentally Handicapped	12	45-65	720	780
Material Storage			70	75
Trainable Mentally Handicapped	10	45-75	700	750
Material Storage			70	75
Student Toilet			40	45
Severely and Profoundly Handicapped	5	90-150	625	750
Material Storage			70	75
Student Storage			25	30
Student Toilet and Bath			640	800
Material Storage			70	75
Student Toilet and Bath			90	100
Emotionally Disturbed	8	80-90	640	800
Material Storage			70	75
Student Storage			25	30

(1) Consult State Department of Education specialists for planning guide and/or assistance.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
SPECIALIZED SPACES				
Drama Classroom	25	28-30	700	750
Material Storage			60	70
Large Group Instruction (Lecture Area)	175	7-9	1225	1575
Green House - Attached				Needs Vary
VOCATIONAL AGRICULTURE				
General Shop				
Work Area	15	120-130	1800	1950
Planning/Classroom			700	750
Material Storage			200	270
Project Storage			190	210
Toilet/Lavatory			100	150
Horticulture Shop				
Work Area	15	60-75	900	1125
Planning/Classroom			700	750
Material Storage			200	270
Project Storage			100	150
Greenhouse	15	90-100	1350	1500
Material Storage			165	185
VOCATIONAL - TECHNICAL				
Drafting	20	140-160	2800	3200
Related Instruction Classroom			500	600
Material Storage			150	200
Tool Storage			100	125
Project Storage			100	125
Auto Mechanics	20	260-280	5200	5600
Related Instruction Classroom			500	600
Material Storage			175	200
Project Storage			100	150
Tool Storage			150	200
Flammable Storage			75	90
Machine Shop	20	240-260	4800	5200
Related Instruction Classroom			500	600
Material Storage			260	275
Project Storage			175	200
Tool Storage			145	175
Building Construction	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			250	300
Tool Storage			175	200

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
VOCATIONAL-TECHNICAL (Cont.)				
Electricity/Electronics	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			250	300
Project Storage			120	160
Tool Storage			120	120
Printing/Graphics Arts	20	160-180	3200	3600
Related Instruction Classroom			500	600
Material Storage			150	250
Tool Storage			100	150
Welding	20	240-260	4800	5200
Related Instruction Classroom			500	600
Material Storage			375	500
Tool Storage			200	300
Plumbing/Heating/Sheet Metal	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			350	400
Tool Storage			200	300
Equipment Storage			300	330
Radio/TV Repair	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			250	300
Project Storage			120	160
Tool Storage			120	120
Refrigeration/AC	20	240-250	4800	5000
Related Instruction Classroom			500	600
Material Storage			215	235
Tool Storage			120	120
Project Storage			120	160
Industrial Arts/Technology Education				
Work Area	25	45-50	1125	1250
Planning/Classroom			700	750
Material Storage			200	270
Project Storage			190	210
Finish Area			190	210
Toilet/Lavatory			100	150
Business Education				
Technology Lab	20-25	70-75	1400	1875
Office			100	120
Classroom/Conference			700	750
Material Storage			100	120
Marketing Education				
Lab/Classroom	25	60-70	1500	1750
Material Storage			120	130
Office			100	120

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
VOCATIONAL-TECHNICAL (Cont.)				
Communications	20	140-160	2800	3240
Related Instruction Classroom			500	600
Material Storage			200	300
Tool Storage			175	200
Computer Repair/Networking	20	140-160	2800	3200
Related Instruction Classroom			500	600
Material Storage			350	400
Project Storage			350	400
Tool Storage			175	225
Mechanical	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			350	400
Tool Storage			200	300
Metals	20	175-200	3500	4000
Related Instruction Classroom			500	600
Material Storage			350	400
Tool Storage			200	300
Cabinetmaking	20	240-250	4800	5000
Related Instruction Classroom			500	600
Material Storage			375	500
Tool Storage			175	200
Flammable Storage			75	90
Carpentry	20	240-250	4800	5000
Related Instruction Classroom			500	600
Material Storage			500	600
Tool Storage			175	200
Flammable Storage			75	90
Cosmetology	20	180-200	3600	4000
Related Instruction Classroom			500	600
Material Storage			300	350
Tool Storage			175	200
Flammable Storage			75	90
Electrical Trades	20	240-250	4800	5000
Related Instruction Classroom			500	600
Material Storage			215	235
Tool Storage			120	120
Project Storage			120	160
ICE Individualized Co-op Ed	20	30	600	1200
Related Instruction Classroom			600	600
Computer Laboratory			600	600
Storage			100	100
Masonry	20	240-250	4800	5000
Related Instruction Classroom			500	600
Material Storage			250	300
Tool Storage			200	250

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
VOCATIONAL-TECHNICAL (Cont.)				
Power Products	20	180-200	3600	4000
Related Instruction Classroom			500	600
Material Storage			350	500
Tool Storage			150	200
Project Storage			200	250
AUXILIARY SPACES				
ADMINISTRATION				
Principal's Office			140	150
Other Administrative Personnel (per office)			100	120
Reception/Secretarial Area			200	250
Office Workroom and Storage			250	350
Conference Room			300	400
Records/Vault			60	75
Attendance Office			120	150
Book/General Storage			125	200
Itinerant Office (per office)			100	120
Book/General Storage			125	200
STAFF PERSONNEL SPACE				
Teacher's Workroom and Storage			200	300
Faculty Lounge			500	-
Kitchenette			-	60
Staff Toilet - Individual (Each) (1)			45	65
GUIDANCE AND COUNSELING				
Counselor's Office (Each)			120	150
AUDITORIUM (2)(3)				
General Seating	600	7	4200	-
Gallery and Lobby Area	Based on seating for approx. 600		1000	-
Standard Proscenium Stage and Off-Stage area	"		3000	-
General Storage	"		150	-
Storage/Properties Storage	"		600	-
Scenery Storage	"		500	-
Stage Dressing Rooms (Each)	"		200	-
Toilet (Each) (1)	"		45	-
Public Toilets (Each) (1)	"		150	-
Ticket Office	"		100	-
Concession	"		120	-
Material Storage	"		80	-
Lecture Area (Two-Room Unit 1250 Each)			2500	-
Lecture Area (One-Room Unit)			2500	-

(1) See Page 25 for toilet fixture recommendations.

(2) Consult State Department of Education specialists for planning guide and/or assistance.

(3) Multi-use of this space is encouraged.

AUXILIARY SPACES	MEALS SERVED PER DAY					
FOOD PREPARATION, SERVICE AND DINING FACILITIES						
Kitchen	200	400	600	1000	1400	1600
Receiving	80 sq. ft.	100 sq. ft.	120 sq. ft.	160 sq. ft.	180 sq. ft.	200 sq. ft.
Dry Food Storage	80 sq. ft.	180 sq. ft.	280 sq. ft.	480 sq. ft.	640 sq. ft.	840 sq. ft.
Nonfood Storage	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq. ft.	15 sq.ft.
Preparation Area	475 sq. ft.	660 sq. ft.	840 sq. ft.	960 sq. ft.	1320 sq. ft.	1400 sq. ft.
Refrigeration Storage	160 sq. ft.	160 sq. ft.	160 sq. ft.	180 sq. ft.	320 sq. ft.	320 sq. ft.
Dishwashing Area	120 sq. ft.	120 sq. ft.	120 sq. ft.	240 sq. ft.	240 sq. ft.	240 sq. ft.
Office/Locker Area/ Toilet	40 sq. ft.	80 sq. ft.	120 sq. ft.	180 sq. ft.	240 sq. ft.	320 sq. ft.
Serving Area	320 sq. ft.	450 sq. ft.	600 sq. ft.	600 sq. ft.	900 sq. ft.	1200 sq. ft.
Dining Area	2400 sq. ft.	2400 sq. ft.	2400 sq. ft.	3995 sq. ft.	5590 sq. ft.	7200 sq. ft.

	MEALS SERVED PER DAY			
FOOD PREPARATION, SERVICE AND DINING FACILITIES ALTERNATE METHOD	100-200	200-400	400-600	600-1000
Kitchen, (including all related functions)	800-1000 sq. ft.	1000-1500 sq. ft.	1500-1800 sq. ft.	1800-2000 sq. ft.
Dining Area	Minimum 10 sq. ft. per person			

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
NURSE/HEALTH CLINIC				
Office, Examining Room, Cot Area			270	-
Storage			80	-
Toilet			50	-
MEDIA CENTER/LIBRARY (1)				
Office/Workroom	10% of Enrollment or a		150	200
Reading/Browsing	Maximum of 100 students	26-28	1400	-
Stacks	"	5 - 5.5	-	-
Processing	"	3 - 4	-	-
Products/Prof.Lib.	"	3 - 4	-	-
AV Storage	"	3 - 4	-	-
Periodical Storage	"	1 - 2	-	-
Maintenance/Repair	"	.5 - 1	-	-
Copy	"	1 - 1.5	-	-

(1) Consult State Department of Education specialists for planning guide and/or assistance.

(9-12)

Activity	Student Capacity	Square Feet Per Student	*Acceptable* Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
MUSIC (1)				
All-Purpose (Small Schools)	54	22-24	1200	1600
Practice Room (Each)			35	45
Music Library (2)			80	90
Office/Reference/Storage			100	120
Material Storage			120	130
Instrument Storage (Secured)			200	400
Uniform Storage			100	-
Vocal Classroom (14' to 16' Ceiling Height)				
Small	50-70	14-16	700	1120
Large	60-80	16-18	960	1440
Practice Room (Each)			35	40
Music Library			150	-
Office/Reference/Storage			100	120
Material Storage			120	130
Robe Storage			100	-
Instrumental (14' to 16' Ceiling Height)				
Small	60-70	22-24	1320	1680
Large	70-90	22-24	1540	2160
Practice Room (Each)				
Band/Instrumental			48	-
Piano/Guitar			80	-
Ensemble Rehearsal			120	-
Instrument Storage (Secured)				
60 Members or less			250	300
60 to 100 Members			450	-
Over 100 Members			450 plus 13 sq. ft./ students over 100	
Instrument Repair			75	100
Music Library (2)			150	-
Director's Office			100	120
Material Storage			120	130
Uniform Storage			100	-

(1) Consult State Department of Education specialists for planning guide and/or assistance.
(2) Increase if combined with Director's Office.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
PHYSICAL EDUCATION				
Gymnasium (Main) (20' Ceiling Height Min.)				
Basketball Court (50' x 94') plus 8' safety lanes			7260	-
Spectator Seating	500	4	2000	-
Lobby			550	-
(Based on seating of approx. 500)				
Public Toilets (1)			300	-
Ticket Office			50	-
Concession			120	-
Trophy Display			30	-
P.E. Dressing Rooms (Each)				
Locker/Dressing Area	50	12	600	-
Shower Area	50	4	200	-
Drying Area	50	2	100	-
Toilet (1)	50	2	100	-
Sports Dressing Rooms (Each)				
Locker/Dressing Area	50	12	600	-
Shower Area	50	4	200	-
Drying Area	50	2	100	-
Toilet (1)	50	2	100	-
P.E. Health Classroom			840	-
P.E. Activity Room			1200	-
Office and Storage				
Office			100	-
Toilet and Shower (1)			90	-
Storage (General)			150	-
Storage (Equipment)			360	-
Multipurpose Room	165	8.5	1400	-
Weight Room	89	4.5	400	-
Gymnastics	75	8	600	-
Wrestling			1000	-
Swimming Pool - Interior				
Pool (45' x 75')		40	3375	-
Pool with 10' deck on end and sides			6175	-

(1) See Page 25 for toilet fixture recommendations.

Activity	Student Capacity	Square Feet Per Student	Acceptable Minimum Total Net Area In Square Feet	Recommended Total Net Area In Square Feet
STUDENT SPACES				
Student Store				
General Sales Area			50	75
Material Storage				Needs Vary
Student Personnel Storage	100% Student Enrollment	.5-.10	-	-
SERVICE AND STRUCTURE SPACES				
REST ROOMS				
Student Toilet (1)	100% Student Enrollment	1.25-1.5	-	-
CUSTODIAL				
Custodial Closet with mop sink	Minimum One per floor, One each 8000 sq. ft. of floor area		-	60
Custodial Office			75	90
Locker Room	One locker per employee			Needs Vary
Toilet (1)			45	65
Workshop				Needs Vary
Storage-Materials, Equipment, Custodial Supplies, Receiving and Shipping Area			60	100
				Needs Vary
STORAGE				
General Storage			75	125
External Storage				
Grounds Maintenance Equipment			75	125
Physical Education Equipment Storage			100	150
Flammable Material Storage				Needs Vary
MECHANICAL ROOMS, CORRIDORS AND WALL AREA Should not utilize more than 20% of the gross square foot area of the building.				

(1) See Page 25 for toilet fixture recommendations.

SITE DEVELOPMENT GUIDELINES

Oklahoma School Site Size Recommendations

For Elementary Schools K-6: A minimum of ten acres, plus one additional acre for each 100 students of projected ultimate maximum enrollment.

For Middle School/Junior High Schools 7-8; 7-8-9: A minimum of 20 acres, plus one additional acre for each 100 students of projected ultimate maximum enrollment.

High Schools 9-12: A minimum of 30 acres, plus one additional acre for each 100 students of projected ultimate maximum enrollment.

- For school sites in densely populated areas and in other locations where land costs are extremely high, the recommended number of acres may prove to be unrealistic.
- For school sites in open country or sparsely settled areas, acreages may justifiably exceed the recommendations above.
- For school sites immediately adjacent to park and recreation lands, the number of acres that would actually be school owned may be modified. Cooperation with local park authorities and other governmental agencies is encouraged, resulting in joint use of common areas or facilities.

SITE PLANNING GUIDELINES

Activity	Acceptable Minimum	Recommended
WALKS, DRIVES, PARKING		
Walks	4' wide	6' wide
Covered Bus Loading	6' x 35'	8' x 40'
GREENHOUSE STRUCTURE (Separate)	20' x 40'	-
EXTERIOR STORAGE		
Grounds Maintenance Equipment	75 sq. ft.	125 sq. ft.
Physical Education Equipment Storage	100 sq. ft.	150 sq. ft.
HAZARDOUS MATERIALS		
Volatile Storage	100 sq. ft. minimum	

PLAY SHELTER (An open structure having only a roof and a finished play surface such as asphalt, concrete, synthetic, or other similar material.)

Activity	Number of Users	Acceptable Minimum	Recommended
Kindergarten	Maximum enrollment x 10%	10 sq. ft./user	12.5 sq. ft./user
Elementary: Middle School/ Junior High Schools	Maximum enrollment x 10%	12 sq. ft./user	15 sq. ft./user
Swimming Pool (Outdoor)			
Elementary:			
Pool		-	30' x 60'
Deck: End		10'	12'
Deck: Sides		8'	10'

SITE PLANNING GUIDELINES (Cont.)

Activity	Number of Users	Acceptable Minimums	Recommended
Middle School/Junior High School:			
Senior High School:			
Pool		-	60' x 75'
Deck: End		12'	15'
Deck: Sides		8'	10'

OVERALL PLAY ACTIVITY AREA REQUIREMENTS

PLAY ACTIVITY	ELEMENTARY SCHOOLS	MIDDLE SCHOOLS/ JR. HIGH SCHOOLS	SENIOR HIGH SCHOOLS
Archery	-	150' x 150'	150' x 300'
Badminton	-	20' x 44'	20' x 44'
Baseball	210' x 210'	300' x 300'	400' x 400'
Basketball	40' x 60'	50' x 84'	50' x 94'
Dodgeball	20' circle	30' circle	-
Field Hockey	-	180' x 300'	180' x 300'
Football	-	160' x 360'	160' x 360'
Handball, Single-Wall	-	20' x 40'	20' x 40'
Handball, Four-Wall	-	23' x 46'	23' x 46'
Hopscotch	10' x 20'	-	-
Horseshoes	10' x 40'	10' x 50'	10' x 50'
Shuffleboard	-	6' x 52'	6' x 52'
Skip Rope	10' x 20'	-	-
Soccer	-	150'-240' x 240'-360'	-
Softball	150' x 150'	200' x 200'	275' x 275'
Tennis Court	-	36' x 78'	36' x 78'
Tetherball	20' circle	12' circle	12' circle
Volleyball	25' x 50'	30' x 60'	30' x 60'

TABLE OF WORKING HEIGHTS

	ELEM. SCHOOL		MS/JR HIGH SCHOOL		HIGH SCHOOL
Fixture Name	Kindergarten	1 2 3	4 5 6	7 8 9	10 11 12
Chalkboard/ Tackboard (To Bottom)	24"	26"	28"	*32"	36"
Coat Hooks	36"	38"	46"	60"	60"
Water Closet (To Rim)	11"	13"	*13"	13"	15"
Urinal, Wall Hung (To Rim)	16"	16"	18"	20"	22"
Lavatory (To Rim)	20"	22"	25"	28"	30"
Case Cabinet Sink and Work Counter (To Rim)	24"	26"	30"	32"	36"
Drinking Fountain/Water Cooler	24"	24"	28"	32"	*35"
Paper Towel Dispenser/Electric Hand Dryer (To Bottom)	40*	46"	48"	54"	60"
Mirrors - 24" x 36" (To Bottom)	30"	*36"	42"	42"	45"
Handrails (Nosing to Rail)	30"	30"	30"	32"	32"

NOTES: (*) Use this dimension for areas common to more than one group.
Refer to other publications for accessible installation heights and requirements.

TOILET FIXTURE GUIDELINES FOR EDUCATIONAL OCCUPANCIES

Student Requirements	Number of Fixtures Required		
	Boys	Unisex	Girls
ELEMENTARY SCHOOLS K-6			
Classroom Toilets			
Kindergarten (1)			
Water Closet:		1	
Lavatory:		1	
Serving One or Two			
Instructional Spaces			
Water Closet:	1		1
Lavatory: (2)	1		1
Urinal:	1		-
General Facilities			
Water Closet:	1 @ 50 pupils		1 @ 50 pupils
Lavatory:	1 @ 50 pupils		1 @ 50 pupils
Urinal:	(3)		
MIDDLE SCHOOLS/JUNIOR HIGH SCHOOLS 6-7-8, 7-8, 7-8-9; SENIOR HIGH SCHOOLS 9-12			
General Facilities			
Water Closet:	1 @ 50 pupils		1 @ 30 pupils
Lavatory:	1 @ 50 pupils		1 @ 30 pupils
Urinal:	(3)		-

Staff Requirements	Number of Fixtures Required		
	Men	Unisex	Women
ALL GRADE LEVELS			
Water Closet:	1 @ 10 faculty		1 @ 7 faculty
Lavatory	1 @ 10 faculty		1 @ 10 faculty
Urinal:	1 @ 20 faculty		-
CUSTODIAL STAFF			
Water Closet:		1 @ 10 employees	
Lavatory:		1 @ 10 employees	

NOTE: If a school has less than 12 grade sections, then one private restroom (designated to serve clinic, faculty, and administrative staff) should be considered as a minimum. If a school has 12 or more grade sections, provide at least one private restroom for the clinic and administrative staff, in addition to those required above for the teaching and/or custodial staff. A gymnasium with bleacher seating would fall under assembly occupancy. Building codes would then require approximately one water closet per 40 females and one water closet per 75 males.

(1) One restroom may serve both boys and girls in a kindergarten or first grade instructional space.
(2) One lavatory located outside restroom is sufficient.
(3) One-half of water closet requirement can be urinals.